

REMARKS

Claims 1-12 are pending in the present application. Claims 1, 5 and 9 are independent. Claims 2-12 are new.

Objection to Specification

The specification has been objected to due to minor informalities. The specification is amended herein to address the informalities identified by the Examiner. Further, the specification contains amendments to address grammatical changes. No new matter is believed to be added by the specification amendments. Accordingly, Applicant respectfully request removal of this objection.

Claim Rejection Under 35 U.S.C. § 102

Claim 1 has been rejected under 35 U.S.C. § 102(e) as being anticipated by Vogel (U.S. Patent No. 5,668,596). Applicant respectfully traverses this rejection.

In support of this rejection, the Examiner cites Column 4, Lines 45-58. This portion of Vogel discloses various imaging devices. For example, lines 45-50 describe a digital imaging device that uses an electronic sensor to capture an image either from an object or a medium such as film and signal processing to represent the captured signal numerically and a storage device to store the numerical image data. In particular, Vogel provides a digital camera as an example of a digital imaging device and describes a digital camera as having a removable storage device such as a memory card to store images. Vogel further

describes that the image data provided by the digital image device is stored in the memory card and is ordinarily used to produce some type of display or print.

Further, as shown in Figure 8 and discussed in Column 4, Line 64 through Column 5, Line 20, a digital processor 12 is utilized to process data generated by digital image devices such as a scanner or memory card of an electronic camera and links the input devices of the camera and scanner to an output device such as a CRT 17 or printer 18. Additionally, the digital processor 12 may contain a color managing system.

In summary, Vogel merely teaches in Column 4, lines 45-58 that a digital image is generated by a digital camera or a film scanner, the digital camera uses a memory card and the data generated by the digital device or stored in the memory card is shown on a display or printed, as shown in Figure 8. Further, Vogel only teaches the following two parallel data flows of data: (1) from the film scanner to the printer or the CRT; and (2) from the memory card to the printer or the CRT.

As a result, Vogel fails to disclose at least, "an image signal recording means which records the digital image signal in the predetermined format on a recording medium which can be loaded in the digital camera," as recited in claim 1. Rather, Vogel discloses removing data from the memory card of the digital camera and displaying it on the CRT or generating an image using a printer.

Accordingly, claim 1 is allowable over the prior art, and Applicant respectfully request removal of this rejection.

New Claims

Newly added claims 2-12 are supported in the specification on at least pages 6-8 and Figure 1. Further, independent claims 5 and 9 are allowable at least because the prior art fails to teach, "a format converter converting the format of the digital image signal into a predetermined format used in a digital camera," as recited by claim 5. Regarding claim 9, the prior art fails to teach at least "converting the format of the digital image signal into a predetermined format used in a digital camera," as recited by claim 9.

Regarding dependent claims 2-4, 6-8 and 10-12, these claims are allowable at least for the same reasons as their corresponding independent claims.

CONCLUSION

In view of the above amendments and remarks, reconsideration of the rejection and allowance of claim 1 is respectfully requested.

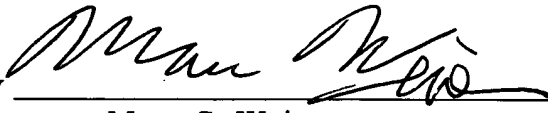
Attached hereto is a marked-up version of the changes made to the application by this Amendment.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to contact

Jayne Saydah (Reg. No. 48,796) at (703) 205-8000, in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,
BIRCH, STEWART, KOLASH & BIRCH, LLP

By 
Marc S. Weiner
Registration No. #32,181

P.O. Box 747
Falls Church, VA 22032-0747
(703) 205-8000

MSW/JES/abs

Enclosures: 15 Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification

Please replace the paragraph beginning on page 3, line 2, with the following rewritten paragraph.

However for the provider of such a service, the digital image signal taken by a digital camera is advantageous over a digital image signal obtained by reading a picture on photographic camera since the former digital image signal does not require, for instance, an image scanner, which [less] cost the provider less. Further when providing a service installing a seal print machine or the like, the cost of the machine can be greatly reduced by limiting the images handled by the machine only to those taken by digital cameras. It is expected that various services and/or systems only for images taken by digital cameras will spread with the spread of digital cameras.

Please replace the paragraph beginning on page 5, line 7, with the following rewritten paragraph.

By loading developed film in the image conversion system of the one embodiment of the present invention, a digital image signal representing an image on the film [which is] may be recorded in a format used in a digital camera on a recording medium which can be loaded in a digital camera. Accordingly, pictures recorded on photographic [camera] film can enjoy service only for digital cameras without use of a personal computer.

Please replace the paragraph beginning on page 5, line 14, with the following rewritten paragraph.

This means that even if the service providers limit a part of their services or the objects of handling of their systems to digital cameras only, the customers [does] do not undergo great inconvenience and the providers can reasonably reduce the cost of service by limiting the object of handling to digital cameras only.

Please replace the paragraph beginning on page 6, line 16, with the following rewritten paragraph.

The image conversion system 1 may be, for instance, in the form of a system comprising a personal computer loaded with exclusive image processing program, a film scanner and a peripheral [devices] device such as a medium drive or in the form of an image conversion unit in which all the functions are incorporated in one housing.

Please replace the paragraph beginning on page 7, line 11, with the following rewritten paragraph.

Then, the digital image signal is transformed into a color space of an image taking system of a digital camera by color transformation means 8 of the image processing means 7, whereby an 8-bit digital image signal where each of R, G and B are expressed in 8 bits is obtained. Further, the 8-bit digital image

signal is converted into a format for digital cameras, e.g. Exif, by a format conversion means 9 of the image processing means 7.

Please replace the paragraph beginning on page 7, line 19 and ending on page 8, with the following rewritten paragraph.

The digital image signal in the converted format is recorded on a recording medium 2 for digital cameras by the image signal recording 10. When the user sets a recording medium together with the film 3, the image signal recording means 10 records the digital image on the recording medium set by the user, and when the user sets only the film 3, the image signal recording means 10 records the digital image on a recording medium 2 of a designated kind taken out from the medium storage portion 11. Then, the recording medium 2 on which the digital image signal is recorded is dispensed to the user.

Please replace the paragraph beginning on page 8, line 4, with the following rewritten paragraph.

Various formats for digital cameras other than Exif are proposed by various digital camera makers. Accordingly, it is preferred that the image conversion system 1 be arranged so that the user can select a format from a plurality of formats, for instance, displayed on a monitor. In this case, the format conversion means 9 converts the digital image signal into the format

selected by the user which is input into the format conversion means 9 by a known means such as a keyboard.

Please replace the paragraph beginning on page 8, line 13, with the following rewritten paragraph.

Similarly, it is preferred that the image conversion means 1 be arranged so that the recording medium 2 can be selected from a plurality of kinds of recording media such as a smart medium (SSFDC), a PCMCIA card, a compact flash memory and the like. In this case, a plurality of kinds of recording media are stored in the medium storage portion 11 and a recording medium of the kind selected by the user is taken out from the storage portion 11 and the digital image signal is recorded on the recording medium.

Please replace the paragraph beginning on page 8, line 22 and ending on page 9, with the following rewritten paragraph.

On the recording medium 2 dispensed from the image conversion system 1, the digital image signal is recorded in the same form as the obtained by taking a picture by a digital camera. Accordingly, the recording medium 2 can be handled by a system such as a seal print machine for only images taken by a digital camera, e.g., a system only for smart media.

Please replace the paragraph beginning on page 9, line 10, with the following rewritten paragraph.

Thus, the image conversion system of the present invention makes it feasible to provide the same services for all the users irrespective of whether they possess a digital camera or whether they possess a personal computer.

In the Claims

The claim has been amended as follows:

1. (Amended) An image conversion system comprising:

a digital image generation means which reads out an image on photographic film and generates a digital image signal representing the image[,];

a format conversion means which converts the format of the digital image signal into a predetermined format used in a digital camera[,]; and

an image signal recording means which records the digital image signal in the predetermined format on a recording medium which can be loaded in the digital camera.

Claims 2-12 are new.